AMENDMENT TO THE CLAIMS

What is claimed is:

1. (currently amended) In a bi-directional communication system, a method for directing packetized data to a local network wherein said packetized data comports to hierarchical layers of communication protocols, comprising the steps of:

comparing a received IP packet destination address in a first protocol layer with a predetermined IP address to determine if there is an address match; and

redirecting a payload of said received IP packet from an Internet network to said local network in response to said address match by;

substituting a second protocol layer address, in a packet of said packetized data, for a received second protocol layer destination address corresponding to a destination accessed on said local network, where both the second protocol layer address and the received second protocol layer destination address reside in a second protocol layer different than the first protocol layer.

2. (currently amended) A method according to claim 1, wherein if there is no address match

said payload of said received IP packet is directed to a different destination that than said local network to support a first Application operating concurrently with a different second Application being performed with said local network.

3. (original) A method according to claim 2, wherein

said first Application is one of (a) a web surfing application, (b) Email, (c) Internet phone/videophone, and

said second Application is one of (i) home appliance control, (ii) peripheral control and (iii) a diagnostic function.

4. (currently amended) A method according to claim 1, wherein

said bi-directional communication system is a cable modem and including the step of

initiating an Application in response to receiving said directed payload.

5. (currently amended) A method according to claim 1, wherein

said redirecting step redirects a payload of said received IP packet ~~from a first network~~ to a communication buffer present in said local network to support a local application comprising one or more of, (a) home appliance control, (b) peripheral control, (c) a communication function, (d) a diagnostic function and (e) secure private internet or intranet communication functions.

6. (currently amended) In a bi-directional communication device using an Internet Protocol (IP), a method for directing IP data, wherein said IP data is structured in the form of hierarchical layers of communication protocols, comprising the steps of:

comparing a received IP packet IP destination address in a first protocol layer with a predetermined IP address to determine if there is an address match, wherein upon said address match, said IP packet is assigned a as ~~to determine a~~ second protocol layer (MAC) destination address that resides in a second protocol layer, in response to said address match; and

redirecting a payload of said received IP packet using said second protocol layer (MAC) destination address ~~determined in response to said address match~~ to a device running an Application corresponding to said second protocol layer destination address.

7. (currently amended) A method according to claim 6, including the steps of

receiving said redirected payload using said second protocol layer (MAC) destination address, and

initiating ~~an~~ said Application in response to receiving said redirected payload.

8. (original) A method according to claim 6, wherein

said predetermined IP address is within a class of one or more addresses designation for private and non-public Internet usage.

9. (currently amended) A method according to claim 6, wherein in said redirecting step

said redirecting step comprises substituting ~~said~~ a second protocol layer (MAC) address that was specified in said IP packet before said comparing step with said ~~for a received~~ second protocol layer (MAC) destination address.

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10. (original) A method according to claim 6, wherein
said redirecting step redirects a payload of said received IP packet from a first network to a different second network on a packet by packet basis.

11. (original) A method according to claim 10, wherein
said payload of said received IP packet is redirected from a first public Internet network to a second local network comprising one of (a) an Ethernet network, (b) a Universal Serial Bus (USB) network and (c) a Home Phoneline Networking Alliance (HPNA) network.

12. (original) A method according to claim 6, wherein
said redirecting step redirects a payload of said received IP packet from a first network to a communication buffer within said bi-directional communication device.

13. (original) A method according to claim 12, wherein
said redirecting step redirects a payload of said received IP packet from a first network to a communication buffer within said bi-directional communication device to support a local application comprising one or more of: (a) home appliance control, (b) peripheral control, (c) a communication function, (d) a diagnostic function and (e) secure private internet or intranet communication functions.

14. (currently amended) A method according to claim 12, wherein
for individual received IP packets said redirecting step redirects payloads of said received IP packets from a first network to a communication buffer within said bi-directional communication device by substituting ~~said~~ a second protocol layer (MAC) address that was present in said IP packets before said comparing step for a received second protocol layer (MAC) address.

15. (original) A method according to claim 12, wherein
said bi-directional communication device is a cable modem.

16. (currently amended) A method according to claim 6, wherein

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said second protocol layer (MAC) <u>destination</u> address is determined from a database mapping said received IP packet destination address to said second protocol layer (MAC) <u>destination</u> address.

Claims 17-20 (cancelled)

21. (currently amended) In a bi-directional communication system, a method for directing packetized data between different networks using hierarchical layers of communication protocols comprising the steps of:

intercepting a domain name resolution request if a domain name matches a predetermined entry in a domain name database;

translating said intercepted domain name to a predetermined IP address; and

redirecting a payload of a received IP packet destined for said <u>intercepted domain name</u> ~~predetermined IP address~~, wherein said redirecting step substitutes a different MAC layer address for a received MAC layer address.

22. (cancelled)

23. (original) A method according to claim 21 including the step of communicating said predetermined IP address to a requesting client.

24. (previously presented) A method according to claim 1, wherein said second protocol layer address is a (MAC) address.